ENVIRONMENTAL ASSESSMENT

PL 84-99 LEVEE REHABILITATION PROGRAM LOWER PLATTE SOUTH NATURAL RESOURCE DISTRICT SALT CREEK, LINCOLN, LANCASTER COUNTY, NEBRASKA

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Report Documentation Page

Form Approved
OMB No. 0704-0188

1. REPORT DATE	2. REPORT TYPE	3. DATES COVERED
MAR 2015		**00-00-2015 to 00-00-2015**

4. TITLE AND SUBTITLE	5a. CONTRACT NUMBER
Environmental Assessment: PL 84-99 Levee Rahabilitation Program Lower Platte South Natural Resource District Salt Creek, Lincoln, Lancaster County, Nebraska	5b. GRANT NUMBER
	5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)	5d. PROJECT NUMBER
	5e. TASK NUMBER
	5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) **U.S. Army Corps of Engineers,Omaha District,1616 Capitol Ave., Ste. 9000,Omaha,NE,68102**	8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)
	11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT
Approved for public release; distribution unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			
unclassified	**unclassified**	**unclassified**	**Same as Report (SAR)**	**47**	

FINDING OF NO SIGNIFICANT IMPACT

PL 84-99 LEVEE REHABILITATION PROGRAM
LOWER PLATTE SOUTH NATURAL RESOURCE DISTRICT
SALT CREEK, LINCOLN, LANCASTER COUNTY, NEBRASKA

March 2015

In accordance with the National Environmental Policy Act and implementing regulations, an Environmental Assessment (EA) has been prepared to evaluate the effects of the proposed Levee Rehabilitation Project along Salt Creek, Lincoln, Lancaster County, Nebraska. The EA was prepared to determine if the proposed scope of work and associated impacts would result in any significant impacts to the human environment. The proposed project consists of reshaping the levee banks back to a 3:1 slope and replacing lost bank material with compacted, non-dispersive clay and riprap; constructing landward piggy-back levees at discrete locations if space is available; installing sheet pile cutoff walls, replacing lost sod, and filling sink holes along portions of the right and left descending banks.

Three alternatives were considered: two Build Alternatives and the No Action Alternative. Under the Preferred Action (Structural Repairs – Alternative 3), the necessary rehabilitation to the Lower Platte South Natural Resource District's Flood Control Works will be preformed and the levees will be returned to pre-disaster conditions in order to provide flood damage reduction. The No Action Alternative was considered and not selected because it would not meet the projects purpose and need, which is to repair the flood control works to pre-disaster condition in order to provide flood damage reduction. Alternative 2 (Nonstructural Repairs) was not selected because under the PL 84-99 Program, this alternative must be requested by the project Sponsor. On October 22, 2014, the project Sponsor sent a letter to the USACE's Natural Disaster Program Manager stating that they do not wish to pursue the option of a Nonstructural Alternative.

The environmental consequences of the proposed action on the physical, biological, and cultural resources have been evaluated. The factors that were influential in the review included (a) the proposed project will repair the damages and allow normal operation of the flood control works; (b) no significant adverse impacts to cultural or historical resources are anticipated to occur; (c) federally endangered and threatened species will not be impacted by the proposed project; (d) all applicable federal and state regulations will be met prior to contract award; and (e) resource agencies and the public have no objections to the proposed action nor are there significant unresolved issues.

In addition, Best Management Practices will be incorporated into the project description to reduce construction-related air quality, water quality, noise, wildlife, and vegetation impacts (as described in Sections 3.2.1, 3.2.2, 3.2.3, 3.2.5, 3.2.6, 3.2.7, and 3.2.8 of the EA).

Based on the disclosure of the impacts contained within the EA, the Lower Platte South Natural Resource District's Levee Rehabilitation Project is not a major federal action that would significantly affect the quality of the human environment and, therefore, does not require preparation of an environmental impact statement.

_____ _____

Date

Joel R. Cross
Colonel, Corps of Engineers
District Commander

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LIST OF ACRONYMS & ABBREVIATIONS

BGEPA - Bald and Golden Eagle Protection Act
BMPs – Best Management Practices
CEQ - Council on Environmental Quality
CWA – Clean Water Act
EA – Environmental Assessment
ER – Engineering Regulation
EIS – Environmental Impact Statement
FONSI – Finding of No Significant Impact
MBTA - Migratory Bird Treaty Act
NDEQ - Nebraska Department of Environmental Quality
NEPA – National Environmental Policy Act
NWD – Northwest Division
NWO – Omaha District
TMDL - Total Maximum Daily Load
USACE – U.S. Army Corps of Engineers
USFWS – U.S. Fish and Wildlife Service

ENVIRONMENTAL ASSESSMENT

PL 84-99 LEVEE REHABILITATION PROGRAM
LOWER PLATTE SOUTH NATURAL RESOURCE DISTRICT
SALT CREEK, LINCOLN, LANCASTER COUNTY, NEBRASKA

1.0 INTRODUCTION.

The U.S. Army Corps of Engineers (USACE), Northwest Division, Omaha District (NWD-NWO), has prepared this Environmental Assessment (EA) to evaluate the potential impacts of rehabilitating the Lower Platte South Natural Resource District's damaged flood control works along the right and left descending banks of Salt Creek in Lincoln, Lancaster County, Nebraska. This EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 and the Council on Environmental Quality's (CEQ) Regulations (40 CFR 1500-1508), as reflected in the USACE Engineering Regulation: ER 200-2-2. This EA provides sufficient information on the potential adverse and beneficial environmental effects to allow the District Commander, USACE, NWO, to make an informed decision on the appropriateness of an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI). The finding of the EA determines whether an EIS is required. If the EA indicates that no significant impact is likely, then the agency can release a FONSI and carry on with the proposed action.

1.1 PROJECT LOCATION

The damaged areas are located along the right and left descending banks of Salt Creek, Lincoln, Lancaster County, Nebraska in Section 23, Township 10 North, and Range 6 East. The lower-most portion of the project is located near the intersection of Superior Street and North 40th Street, and the upper-most portion of the project is located near the intersection of Van Dorn Street and Park Boulevard. See Figure 1 for a general location of Salt Creek within the State of Nebraska and Figure 2 for the approximate locations of the individual damaged areas.

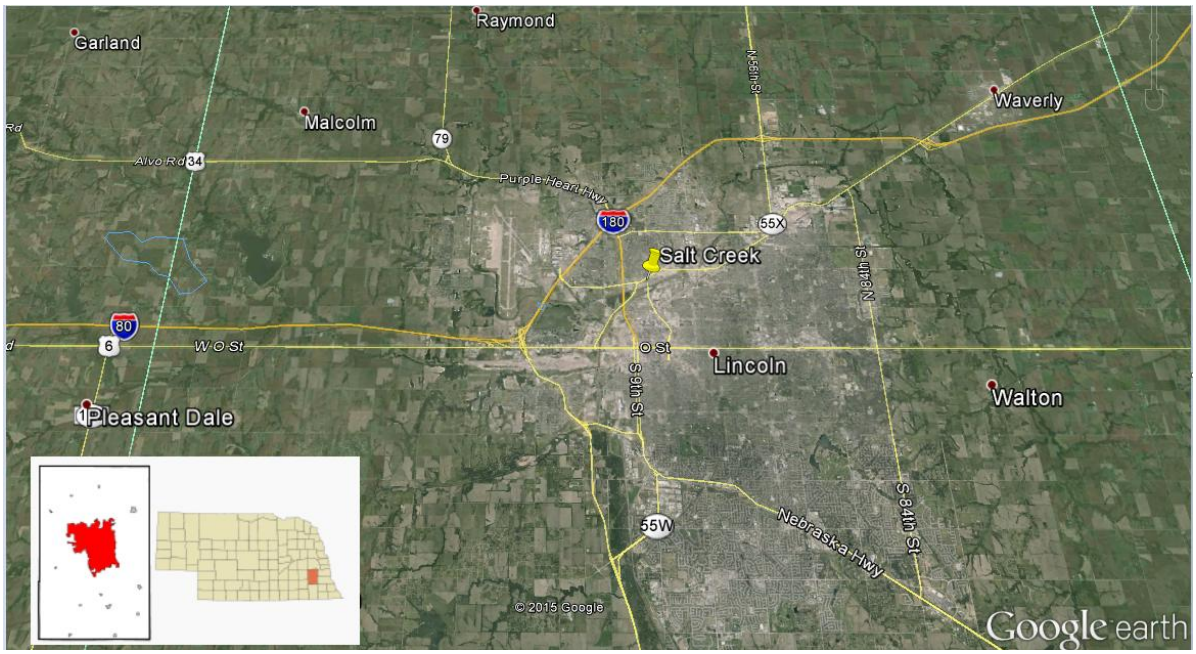


Figure 1. General Location of Salt Creek, Lincoln, Lancaster County, Nebraska.

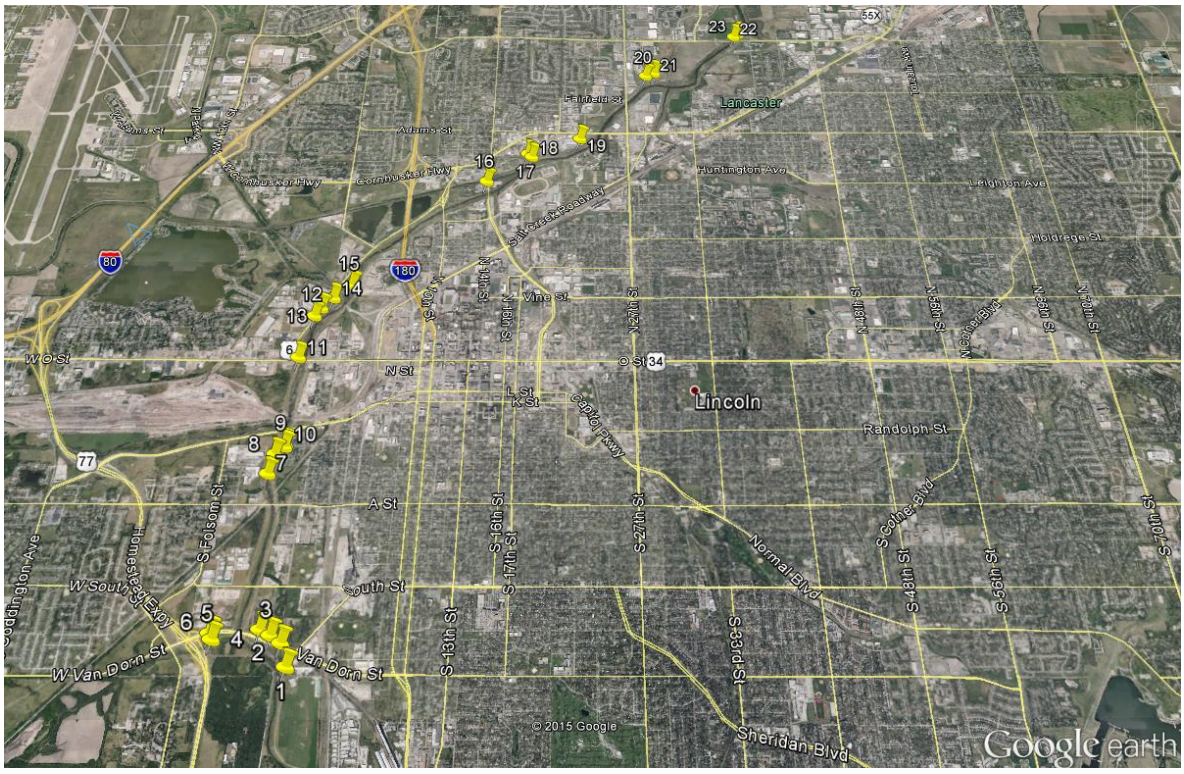


Figure 2. Approximate Locations of the Damaged Areas along Salt Creek.

1.2 PROJECT HISTORY

The flood control project on Salt Creek and its Tributaries, Nebraska, was authorized by the Flood Control Act of 1958 (Public Law 500, 85th Congress), essentially in accordance with the report of the Chief of Engineers contained in House Document 396, 84th Congress, 2nd Session. The plan of improvement for Salt Creek and its tributaries through the city of Lincoln, Nebraska was approved by the Chief of Engineers on July 22, 1963.

The flood control works begin at Calvert Street and extend northeasterly and downstream of Superior Avenue along Salt Creek in and near the City of Lincoln, Lancaster County, Nebraska. The levees essentially begin at Calvert Street, with the right bank tieback levee terminating at high ground approximately 380 feet east of the Union Pacific Railroad, and extend downstream along both banks of Salt Creek. The left bank levee ties off at SYA Highway and recommences at the confluence with Oak Creek near 14th Street and ties off at the Chicago and Northwestern Railroad. The right bank levee ties off at Superior Avenue. Tieback levees on tributaries include both banks of Haines Branch, the right bank of Middle Creek, the left bank of Oak Creek and the right bank of Deadmans Run.

The flood control works consist of approximately seven miles of levees. The levees have 3:1 side slopes that are made up of clay soil, with a two-foot minimum freeboard. The slopes are protected by sod and rock riprap. The height of the levee ranges from eight to 10 feet and the crown is approximately 10 feet wide. Other features of the flood control works include approaches, access ramps, and turnouts; drainage ditches and drainage structures, relief wells, stone spur dikes, riprap, sod, levee crown surfacing, and bar gates.

1.2.1 PROPOSED ACTION (Alternative 3)

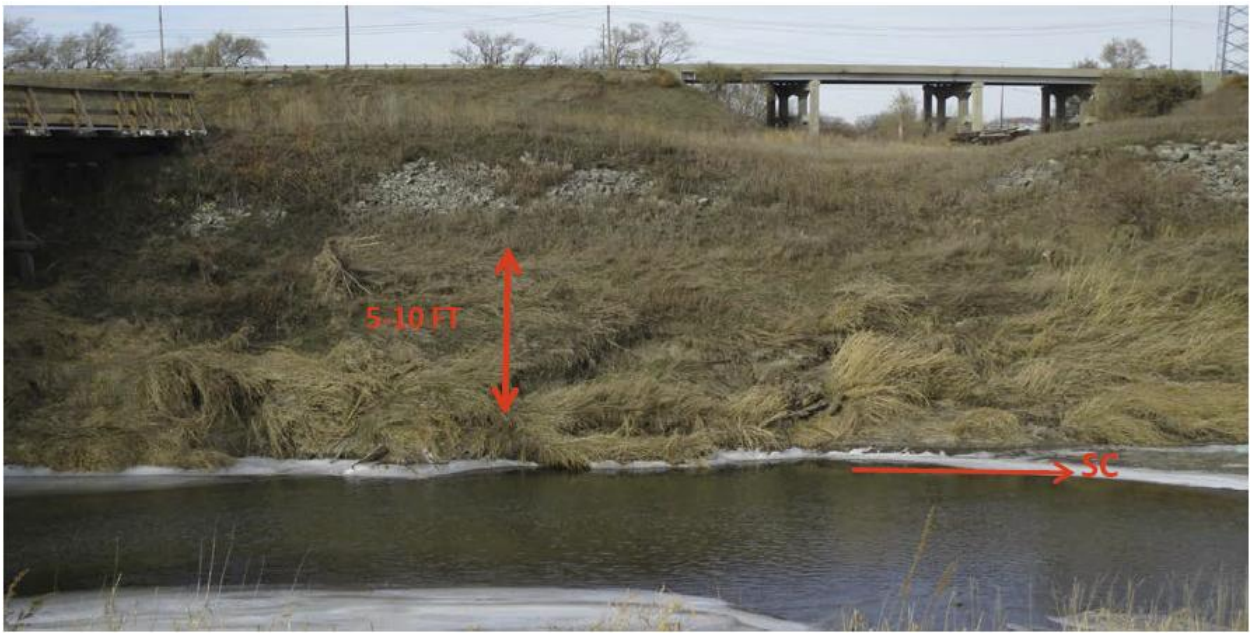
According to the project sponsor, the October 2014 high flow event damaged 23 areas along the Lower Platte South Natural Resource District's Flood Control Works. Upon inspection by USACE personnel, six of the reported damaged areas (identified as areas 5, 6, 7, 8, 11, and 18 in Figure 2 above) were removed from consideration under the PL 84-99 Program because they were determined to be either pre-existing conditions or not part of the USACE levee system and considered not to be a threat to the integrity of the USACE levee. The areas that would be rehabilitated under the PL 84-99 Program are shown in the photos below and include a description of the damage as well as a description of the proposed repair.

Area 1, Station 64+00. This area is located approximately 400 feet south of Park Boulevard and the photo shows channel bank erosion along approximately 100 feet of the right descending bank. The proposed repair would consist of reshaping the levee and replacing lost bank material with compacted, non-dispersive clay and riprap or building a landside piggy back levee if space is available.

Areas 2, 3, and 4, Stations 72 to 80+00. These areas are located between Park Boulevard and Van Dorn Street and the photos show channel bank erosion along a combined area of approximately 1,000 feet of the right descending bank. The proposed repairs would consist of reshaping the levee and replacing lost bank material with compacted, non-dispersive clay and riprap or building landside piggy back levees if space is available.

Areas 9 and 10, Stations 142+00 to 144+00. These areas are located approximately 1,000 feet south of Rosa Parks Way and the photos show sags and sinkholes on the landside of the levee, a slope depression on the riverside of the levee, and a sand boil at the channel bank toe. The proposed repairs would consist of reshaping the levee and replacing lost bank material with compacted, non-dispersive clay and riprap and installing a sheet pile cutoff wall at the channel sand boil.

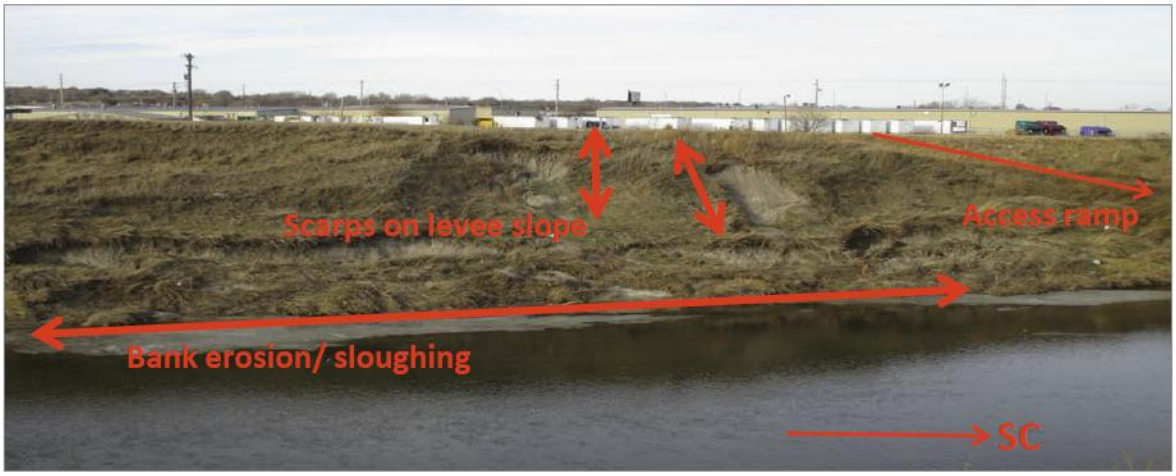
Areas 12, 13, and 14, Stations 193+00 to 203+00. These areas are located approximately 1,200 feet north of "O" Street and the photos show channel bank erosion along a combined area of approximately 1,000 feet of the left descending bank. The proposed repairs would consist of reshaping the levee and replacing lost bank material with compacted, non-dispersive clay and riprap or building landside piggy back levees if space is available.



Area 15, Station 211+00. This area is located approximately 3,000 feet north of "O" street between two railroad bridges and the photo shows channel bank erosion along approximately 100 feet of the left descending bank. The proposed repair would consist of reshaping the levee and replacing lost bank material with compacted, non-dispersive clay and riprap or building a landside piggy back levee if space is available.

Area 16, Station 280+00. This area is located directly west of the Antelope Valley Parkway Bridge and the photo shows channel bank erosion along approximately 200 feet of the left descending bank. The proposed repair would consist of reshaping the levee and replacing lost bank material with compacted, non-dispersive clay and riprap and stabilizing an area with sheet pile to match the adjacent flood repair.

Area 17, Station 299+00. This area is located approximately 1,600 feet east of Antelope Valley Parkway and the photos shows bank erosion along approximately 25 feet of the right descending bank adjacent to an existing weir structure. The proposed repair would consist of reshaping the levee and replacing lost bank material with compacted, non-dispersive clay and riprap.



Area 19, Station 321+00. This area is located near the sewage treatment plant (Salt Creek Roadway) and the photo shows approximately 200 of bank erosion and sloughing along the left descending bank. The proposed repair would consist of reshaping the levee and replacing lost bank material with compacted, non-dispersive clay and riprap and stabilizing the levee toe with sheet pile.

Area 20, Station 364+65. This area is located approximately 900 feet east of 27th Street and the photo shows approximately 75 feet of scour near a box culvert on the left descending bank. The proposed repair would consist of reshaping the levee and replacing lost bank material with compacted, non-dispersive clay and riprap.

Area 21, Station 370+00. This area is located approximately 1,300 feet east of 27th Street and the photo shows approximately 250 feet of bank erosion along the left descending bank. The proposed repair would consist of reshaping the levee and replacing lost bank material with compacted, non-dispersive clay and riprap or building a landside piggy back levee if space is available.

Areas 22 and 23, Stations 415 to 417+00. These areas are located directly south of Superior Street and the photo shows approximately 300 feet of bank erosion and slope sliding along the right descending bank. The proposed repairs would consist of reshaping the levee and replacing lost bank material with compacted, non-dispersive clay and riprap and stabilizing the levee toe with riprap or sheet pile.

Construction of the levee rehabilitation project is proposed for the winter months when Salt Creek flows are low and to ensure repairs are made prior to the anticipated spring high flows. Construction would make use of excavators, loaders, bulldozers, and other similar equipment. Proposed construction would minimally affect area wildlife and recreationalists, and those effects (turbidity, noise, human presence, and increased particulate matter) would stem from construction-related activities. The construction activities would cause temporary avoidance of the area by wildlife and recreationalists. Construction areas disturbed and not otherwise hard-surfaced would be seeded or have sod placed following the construction activities. No long-term disturbances would result from the proposed project and wildlife and recreationalists could return to the area upon project completion.

1.3 PURPOSE AND NEED FOR THE PROPOSED ACTION

The purpose of the PL 84-99 Emergency Levee Rehabilitation Program is to provide emergency assistance to levee districts and communities (project Sponsors) in the form of levee repair and/or flood damage reduction as directed by Congress (33 U.S.C. 701n). This program is described in detail in ER 500-1-1 (USACE, 2001). The proposed Lower Platte South Natural

Resource District emergency rehabilitation project is a PL 84-99 project; its purpose is to restore the project features to pre-disaster conditions to ensure flood damage reduction.

The Lower Platte South Natural Resource District emergency rehabilitation project is needed because high flows in Salt Creek in October 2014 caused extensive damage to project features and created conditions where loss of property is imminent. During the October 2014 high flow event, the Lower Platte South Natural Resource District's flood control works experienced erosion, bank sloughing and slides, lost sod, displaced riprap, and sinkhole development to portions of the right and left descending banks of Salt Creek.

1.4 AUTHORITY FOR THE PROPOSED ACTION

The proposed action is authorized under Public Law 84-99 of the Flood Control Act of 1944.

1.5 PRIOR REPORTS

The following reports have been developed for the Lower Platte South Natural Resource Districts flood control works and are incorporated by reference herein:

- ER 1110-2-100, "Periodic Inspection and Continuing Evaluation of Completed Civil Works Structures," 8 April 1988 to the present.
- ER 1150-2-301, "Local Cooperation," 1 September 1967.
- The Great Flood of 1993 Post-Flood Report – Upper Mississippi River and Lower Missouri River Basins, U.S. Army Corps of Engineers, North Central Division, September 1994.
- Emergency Flood Fight Manual, U.S. Army Corps of Engineers, North Central Division, Omaha District, March 1988.
- Operation and Maintenance Manual for Salt Creek and its Tributaries, Nebraska, Flood Protection Project, U.S. Army Corps of Engineer District, Omaha, Nebraska, 1969.
- Omaha District Rehabilitation Project Approval Report CWIS -84089; Salt Creek Levees, Lower Platte South Natural Resource District, Lincoln Nebraska, U.S. Army Corps of Engineer District, Omaha, Nebraska, September 1993.

1.6 NEPA SCOPING

On February 24, 2015, the USACE prepared an email that detailed the proposed PL 84-99 Levee Rehabilitation Project along Salt Creek and provided an assessment of potential effects of the proposed project on trust resources. The email was shared with resource agencies with potential interest in the project.

This EA was placed on the Corps website to inform the general public of the proposed project and to elicit comments.

2.0 ALTERNATIVES CONSIDERED

One of the major missions of the USACE is to provide emergency levee rehabilitation to levees enrolled in the PL 84-99 Program following disaster events. To be included in the PL 84-99 Program, levee sponsors must routinely inspect and meet construction and maintenance standards set by the USACE. All levee rehabilitation under the PL 84-99 program is limited to restoring the same level of flood risk management to the damaged levee that existed prior to any flood damage; thus, alternatives are limited and generally consist of No Action, Nonstructural Alternatives, and Structural Alternatives.

2.1 ALTERNATIVE 1 – NO ACTION

The No-Action alternative (a.k.a future-without project condition) consists of two scenarios. The first would result in no repair assistance from NWO's PL 84-99 levee rehabilitation program and the levee would sit idle in its damaged condition. However, selection of the "No Action" alternative would likely result in a second scenario that includes a "predictable action by others" as discussed in CEQ (1981). This "predictable action" would consist of the public sponsor repairing the levee and project features without assistance through the PL 84-99 program. The USACE believes that it is not unreasonable to assume that the private entity would work towards rehabilitation of the levee and project features in this case. It is almost always in the sponsor's best economic interest to repair the damaged flood control works, with or without assistance through the PL 84-99 program, because of the value of the farmland and/or infrastructure that the flood control works protect. In addition, the need to protect life, as well as the resiliency historically displayed by the American people when faced with disaster provides further reasoning as to why repairs would likely occur in the absence of assistance through the PL 84-99 program. It is understood though that, in some cases, flood control works may not be repaired due to lack of funds or other reasons, which would then result in increased flood risk to the community. Because the levee sponsor has been active in the PL 84-99 program, has maintained the levee and project features in accordance with that program, and has received letters of "good standing" from the USACE signifying that the sponsor is eligible for PL 84-99 assistance, the No Action alternative was not selected as the preferred alternative. However, the No Action alternative has been carried forward in the planning process in order to provide a comparison between it and the impacts of implementing the Preferred Alternative.

2.2 ALTERNATIVE 2 – NONSTRUCTURAL REPAIRS

Under the PL 84-99 program, the Chief of Engineers is authorized, when requested by the non-Federal sponsor, to implement non-structural alternatives for the rehabilitation, repair, or restoration of flood control works damaged by floods. Nonstructural repairs include modifying structures and property to reduce damages during future flood events. Nonstructural repairs include buyouts of buildings and property, relocating structures, elevating structures, and/or providing ring levees around individual discrete structures. Levee setbacks undertaken for purposes or restoring the floodplain or floodway and incrementally reducing flood heights also fits into the nonstructural category.

On October 22, 2015, the General Manager for the Lower Platte South Natural Resources District sent a letter to the USACE's Natural Disaster Program Manager stating that they do not wish to pursue the option of a Nonstructural Alternative for two reasons: the number of structures located behind the levees in the city of Lincoln, Nebraska and their desire to continue agriculture that currently occurs behind portions of the Salt Creek levees. As such, this alternative was eliminated and not considered further in the Planning Process for rehabilitation, restoration, or repair of the damaged flood control works.

2.3 ALTERNATIVE 3 - STRUCTURAL REPAIRS (PREFERRED ALTERNATIVE)

Structural repairs consist of a variety of measures implemented to return the damaged flood control works to the level of flood control management that existed prior to the flood disaster. Since a variety of components make up the flood control works, the USACE's Natural Damage Assessment Team must first conduct an on-site evaluation of the damaged flood facilities in order to assess the extent of the damage and determine an appropriate fix. This is done during, or immediately following the flood event. As the damage assessments are made, the team concurrently determines the most practicable repair for that particular damaged area (e.g., if a flap gate is damaged, is it more practicable to repair the existing gate or replace it entirely). As stated previously, the Salt Creek flood control works consist of approaches, access ramps, and turnouts; drainage ditches and drainage structures, relief wells, stone spur dikes, riprap, sod, levee crown surfacing, and bar gates. Thus, the extent of repairs could consist of any combination of: replacing protective vegetative cover, resurfacing the levee crown, regrading eroded levee slopes and placing earthen fill or rock, partially repairing or fully replacing drainage structures, constructing piggyback levees, partially repairing or fully replacing bar gates, and so on. While assessing the extent of the damage, the team determines the most cost-effective repair and selects that as the preferred alternative. Please refer to Section 1.2.1 for a detailed description of the damages and proposed repairs.

Rehabilitation of damaged project features is generally proposed for the winter months when flows are low and to ensure repairs are made prior to the anticipated high spring flows. Construction would make use of excavators, loaders, bulldozers, and other similar equipment. Proposed construction would minimally affect area wildlife and recreationalist, and those effects (turbidity, noise, human presence, and increased particulate matter) would stem from construction-related activities. The construction activities would cause temporary avoidance of the area by wildlife and recreationalists. No long-term disturbances would result from the proposed project and wildlife and recreationalists could return to the area upon project completion.

Table 2 provides a summary of the effects of implementing the No Action Alternative and Structural Repair Alternative (Preferred Alternative). Chapter 3 discusses in detail the resources in the affected area and the potential impacts on those resources from implementation of the No Action Alternative and Structural Repair Alternative (Preferred Alternative).

Table 1: Summary of Potential Effects By Alternative		
Resource	**Alternative 1 – No-Action**	**Alternative 3 – Structural Repairs**
Air Quality	Potentially High (but not significant) Construction Related Dust and Exhaust & Potential Dust from Stockpiled Material - Assuming No BMPs are Implemented.	Minor Increases in Construction Related Dust and Exhaust & Potential Dust from Stockpiled Material; minimized with Implementation of BMPs.
Water Quality	Potentially High (but not significant) Increases in Turbidity (Short and Long Term) from Site Runoff and/or Potential Use of Improper Fills, Potential Increases in Fuel and Oil Spillages from Construction Equipment, & Minor Inputs of E. coli from Improper Sanitation Practices –OR- Minor Short term Impacts if BMPs & NPDES Measures are Implemented.	Minor and Short-Term Increases in Turbidity from Site Runoff and Stockpiled Materials. BMPs would be Implemented to Minimize other Adverse Impacts.
Noise	Minor and Temporary Construction-Related Increase in Noise. May or May Not be Reduced with BMPs.	Minor Construction-Related Noise. BMPs would be Implemented to Minimize Noise Impacts.
Wetlands	No Impact.	No Impact.
Aquatic Resources/ Fisheries	Temporary Construction-Related Impacts causing Species to Flee the Area. Upon Project Completion of Construction, Species could Return to the Area.	Temporary Construction-Related Impacts causing Species to Flee the Area. Upon Project Completion, Species could Return to the Area.
Vegetation	Construction-Related Disturbances to Maintained Grasses. No Impacts to Trees. Grassed Areas would be Reseeded Following Construction Activities.	Construction-Related Disturbances to Maintained Grasses. No Impacts to Trees. Grassed Areas would be Reseeded Following Construction Activities.
Wildlife	Construction-Related Disturbances Causing Temporary Avoidance of the Area. Species could Return upon Project Completion. Potential Impacts to Migratory Birds Depending on Season of Construction. No impacts to Bald Eagles.	Construction-Related Disturbances Causing Temporary Avoidance of the Area. Species could Return upon Project Completion. No Impacts to Migratory Birds or Bald Eagles as Pre-Construction Surveys would be Conducted if Construction is within the Nesting Season.
Threatened and Endangered Species	No Impacts	No Impacts
Cultural Resources	No Impacts	No Impacts
Recreation Resources	Minor Disturbance to Fishing, Biking, and Hiking Activities – Construction Related. Recreationalist could Return upon Project Completion.	Minor Disturbance to Fishing, Biking, and Hiking Activities – Construction Related. Recreationalist could Return upon Project Completion.

Economic Resources	Potential Hardship to the Community if Sponsor-Related Funds are solely used to Repair the Flood Control Works. Major Benefit to the Community as Repairs would Provide Pre-Flood Protection.	Major Benefit to the Community as Repairs would Provide Pre-Flood Protection. Minor Benefits to the Local Economy from Increased In-Town Expenditures by Construction Crews During the Construction Period.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This chapter presents an analysis of each resource topic that was identified as having a potential to be affected by implementation of the Proposed Action. Each section describes the environmental setting as it relates to that specific resource topic; the direct and indirect effects that could result from implementation of the Proposed Action; and mitigation measures that would avoid, reduce, or compensate for substantial adverse effects of the Proposed Action.

The relevant resources section of this chapter presents the adverse and beneficial environmental effects of the No Action Alternative (Alternative 1) and the Preferred Alternative (Alternative 3). The section is organized by resource category, and presents the existing conditions of the resource and effects of each of the alternatives on the resource. Impacts are quantified whenever possible. Qualitative descriptions of impacts are explained by accompanying text where used. Also see Table 2 for Summary of impacts to resources by alternative.

"Significance" has been analyzed in this document in terms of both context (sensitivity) and intensity (magnitude and duration):

- Magnitude
    - Minor – noticeable impacts to the resource in the project area, but the resource is still mostly functional
    - Moderate – the resource is impaired, so that it cannot function normally
    - Major – the resource is severely impaired so that it is no longer functional in the project area

- Duration
    - Short term – temporary effects caused by the construction and/or implementation of a selected alternative
    - Long term – caused by an alternative after the action has been completed and/or after the action is in full and complete operation

3.0.1 ENVIRONMENTAL SETTING

The Salt Creek Levee System was constructed from material excavated from the Salt Creek Channel that was then graded and reshaped into the levee system. The channel material originated from nearby drained salt marshes. Emergency levee repair work was performed in 1971 and 1974. The work involved channel riprapping, drainage structure modifications, and

levee surfacing. In 1984, construction of 540 linear feet of stone fill revetment and 25 linear feet of windrow refusal occurred as a result of erosion threatening the wastewater treatment plant. The portion of the levee to be rehabilitated under the preferred alternative runs through the city of Lincoln. The urban setting adjacent to both levees on either side of Salt Creek along with the regularly maintained grasses that are a condition of the PL 84-99 Program designed to help minimize erosion of the flood control works (e.g., levees), drastically limits the habitat in the proposed project area. There are some naturally occurring stands of willow trees located adjacent to Salt Creek and agricultural land near the Superior Street Bridge, but these trees are located outside of proposed disturbance areas and would not be impacted as part of construction.

3.0.2 DESCRIPTION OF THE WATERSHED

Salt Creek is a right-bank tributary to the Platte River and has a total drainage area of approximately 1,640 square miles. Salt Creek flows in an easterly direction from its headwaters near Crete, Nebraska to Roca, Nebraska, where it turns north and flows through the city of Lincoln, Nebraska. Salt Creek is then joined by Oak Creek and flows to the northeast near Waverly, Nebraska and through Ashland, Nebraska until it joins the Platte River near river mile 26.4. Elevations range from over 1,600 feet NGVD along the southern and western edges of the basin to about 1,100 feet NGVD on the eastern side of the basin near the mouth, and creek gradients are of two to three feet per mile. Runoff from approximately 214 square miles of the basin is controlled by 10 flood control dams. The city of Lincoln receives flood protection from the levees on both sides of Salt Creek. Floods within the Salt Creek basin have historically been caused by rainfall and snowmelt.

3.0.3 CLIMATE

Temperatures in Lancaster County, Nebraska range from January average lows of 13 degrees Fahrenheit to July average highs of 90 degrees Fahrenheit. The county receives an average of approximately 29 inches of rain and 26 inches of snowfall per year. On average, there are 216 sunny days per year. The comfort index, which is based on humidity during the hot months, is 38 out of 100, where higher numbers result in more comfortable conditions. The US average comfort index is 44.

3.0.4 GEOLOGY

The soils in the project areas consist of Salmo silty clay loam, Nodaway silt loam, Urban land – Kennebec complex, and Wabash silty clay. Salmo silty clay loam are occasionally flooded, poorly drained soils found on floodplains. The typical profile of these soils is silty clay loam from the surface to 60 inches. Salmo silty clay loam is not considered prime farmland. Nodaway silt loam are frequently flooded, moderately well drained soils found on floodplains. The typical profile of these soils is silt loam from the surface to 60 inches. Nodaway silt loam is not considered prime farmland. Urban land – Kennebec complex are occasionally flooded, moderately well drained soils found on floodplains. The typical profile of these soils is variable silt loam from the surface to 60 inches. Urban land – Kennebec complex is not considered prime

farmland. Wabash silty clay are occasionally flooded, poorly drained soils found on floodplains. The typical profile of these soils is silty clay from the surface to 60 inches. Wabash silty clay is not considered prime farmlands.

3.1 SUBJECT HEADINGS ELIMINATED FROM ENVIRONMENTAL CONSEQUENCES ANALYSIS

The following resources have been considered and found not to be affected by the proposed alternatives. Where there were no potential effects identified, the resource itself has been eliminated from further evaluation and analysis. A summary of eliminated resources follows.

- Prime Farmland
  As stated previously, the soils underlying the project areas where repairs would take place consist of Salmo silty clay, Nodaway silt loam, Urban land – Kennebec complex, and Wabash silty clay. These soils are not considered to be farmlands of importance; therefore, no important farmland soils would be converted to a differing use.

- Environmental Justice
  Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations directs federal agencies to incorporate environmental justice in their decision making process. Federal agencies are directed to identify and address as appropriate, any disproportionately high and adverse environmental effects of their programs, policies, and activities on minority or low-income populations.

  No minority or low-income populations would be displaced or negatively affected by the proposed flood control works repair. Flood protection benefits provided by the proposed repairs would equally benefit people of all ethnic backgrounds and income levels residing and working in the flood protected area; therefore, no environmental justice issues exist.

- Floodplains
  Executive Order 11988, Floodplain Management Guidelines, May 24, 1977, outlines the responsibilities of Federal agencies in the role of floodplain management. Each agency shall evaluate the potential effects of actions on floodplains and should avoid undertaking actions that directly or indirectly support floodplain development.

  Floodplains consist of the relatively flat land along one or both sides of a river channel. Floodplains serve critical roles if allowed to work without alteration. These roles consist of storing water when a river overflows its banks, slowing water velocity which reduces erosion, allowing groundwater recharge, creating fish and wildlife habitat, and most importantly, reducing the overall power of the flood which better protects downstream areas from flooding. Modified floodplains minimize or completely eliminate the natural functions of the floodplain and often change land use. Structures added to the floodplain incrementally reduce its ability to store water. In many areas, flood control projects,

bank stabilization, and channelization of rivers have either completely or partially removed the connectivity of rivers with the floodplain. The majority of the floodplains are now used for either agriculture or urban development. It is expected that over time, more agricultural areas will be converted to urban/suburban uses, as urban populations continue to grow. Because the PL 84-99 Program is a form of maintenance designed to repair flood control works back to their original project purposes, no modification of the floodplain would occur.

3.2 RELEVANT RESOURCES

This section contains a description of relevant resources that could be impacted by each alternative. The important resources described in this section are those recognized by laws, executive orders, regulations, and other standards of National, state, or regional agencies and organizations; technical or scientific agencies, groups, or individuals; and the general public.

3.2.1 AIR QUALITY

Existing Conditions

The Clean Air Act requires the Environmental Protection Agency to set National Ambient Air Quality Standards (40 CFR part 50) for pollutants considered harmful to public health and the environment. The Clean Air Act identifies two types of national ambient air quality standards. Primary standards provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards provide public health welfare protection, including protection against decreased visibility and damage to animals, vegetation, and buildings.

The Environmental Protection Agency has set National Ambient Air Quality Standards for six principal pollutants, which are called "criteria pollutants". These include: ozone, carbon monoxide, nitrogen dioxide, particulate matter, sulfur dioxide, and lead. Lancaster County, Nebraska is in attainment with the National Ambient Air Quality Standards for all criteria pollutants. Attainment means that an area is meeting or is below a given safe standard set by the Environmental Protection Agency for the particular criteria pollutant.

Alternative 1 – No-Action

In the No Action Alternative with the absence of the Federal action addressing flood control works rehabilitation, no adverse air quality impacts would be produced in the project area. However, the local drainage district would likely rehabilitate the flood control works through other means because it is likely in their best economic interest to do so. This would result in temporary construction related air quality impacts like that already occurring in the area from common urban practices (i.e., autos, light construction, and industry). Because the construction would not be conducted as part of a Federal action, it is possible that management measures to reduce minor impacts to air quality (not idling equipment when not in use or not preparing the

project area to minimize dust) might not be implemented. This could result in a higher amount of particulate matter and sulfur dioxide during construction than necessary; however, it is likely that those increased amounts would not reach a significant level that would cause health concerns to humans or the environment. No long-term impacts to air quality would occur following implementation of the No Action Alternative. Under the No Action alternative, no significant impacts to air quality would occur.

Preferred Alternative

The Preferred Alternative would result in a Federal action where the damaged flood control works are definitely rehabilitated. The Preferred Alternative would result in minor and short-term construction-related contributions to particulate matter and sulfur dioxide stemming from the operation of construction equipment. These impacts would be similar to those that occur from existing urban sources such as autos, road work, and industry. The major difference between this alternative and the No Action Alternative where the sponsor rehabilitates the damaged flood control works is the Federal requirement to implement Best Management Practices (BMPs). Best Management Practices are techniques aimed at minimizing adverse effects to trust resources. Best Management Practices that would likely be implemented under the Federal project include, preparing the construction area before grading activities to minimize dust, mulching or covering imported earthen material used for levee repair to prevent wind-blown dust, and avoiding idling construction equipment when not performing needed tasks to minimize sulfur dioxide. With implementation of these BMPs, the temporary construction-related impacts to air quality would not be considered significant. No long-term impacts to air quality would occur from implementation of the Preferred Alternative.

3.2.2 WATER QUALITY

Existing Conditions

Under Section 303(d) of the Clean Water Act (CWA), states are required to submit a list of waters for which effluent limits will not be sufficient to meet all state water quality standards. The failure to meet water quality standards might be due to an individual pollutant, multiple pollutants, "pollution", or an unknown cause of impairment. The 303(d) listing process includes waters impaired by point sources and non-point sources of pollutants. States also must establish a priority ranking for the listed waters, taking into account the severity of pollution and uses.

Water quality management for water bodies in Nebraska is under the jurisdiction of the Nebraska Department of Environmental Quality (NDEQ). The NDEQ develops water quality standards that designate the beneficial uses to be made of surface waters and the water quality criteria to protect the assigned uses. Title 117 – Nebraska Surface Water Quality Standards forms the basis of water quality protection for all surface water quality programs conducted by NDEQ. As required by Section 303(d) of the CWA, NDEQ must submit a list of lakes, wetlands, streams, rivers, and portions of rivers that do not meet state water quality standards (40 CFR 130.7). Water bodies that do not meet state water quality standards are considered "impaired water

bodies" and states are required to calculate total maximum daily loads (TMDLs) for pollutants causing impairments in these waters. A TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards (U.S. Environmental Protection Agency [EPA] 2008). Beneficial uses (also known as designated uses) assigned to the segment of Salt Creek in the area of Lincoln, Nebraska (NE-LP2-20000) include aquatic life (Warm Water Class A), recreation (Class A – primary contact), and agricultural use (Class A). In 2012, Salt Creek was listed as a Category 5 waterbody. Category 5 designates the waterbody as having one or more pollutants that cause, is suspected of causing, or is projected to cause an impairment or threat of impairment to one or more of the designated uses of the waterbody, and states that establishment of a TMDL is required. The suspected pollutants included: conductivity, biological integrity, chloride, a fish consumption advisory, and ammonia.

In 2014, NDEQ proposed to remove the conductivity cause of impairment contending that the wrong designated use was assessed and that the conductivity impairment was from a natural source. The state's EPA-approved water quality standards include an exemption for conductivity occurring from natural sources. In light of this, the EPA stated that a TMDL for conductivity in Salt Creek in the area of Lincoln, Nebraska need not be prepared, consistent with 40 CFR 130.7(b).

Additionally, NDEQ proposed to remove the chloride pollutant cause of impairment in Salt Creek in the area of Lincoln, Nebraska contending that it also occurs from a natural source. An EPA review determined that while the state's conclusion was correct, the state used a non-EPA approved water quality standard in its analysis. Thus, EPA provided information and an approved EPA standard necessary to document the natural condition for chloride and support the conclusion that a TMDL need not be prepared for chloride.

Even though the NDEQ does not have to prepare a TMDL for conductivity or chloride, Salt Creek remains a Category 5 water body for: biological integrity, fish consumption advisory, and ammonia because TMDLs have not yet been developed for these pollutants.

Salt Creek was listed in 2006 for exceeding the standards of recreation-bacteria with E. coli being the pollutant of concern. The NDEQ calculated and approved a TMDL for E. coli in 2007, and that TMDL remains valid today. The E. coli bacteria calculation states that the concentration of E. coli shall not exceed a geometric mean of 126 Colony Forming Units (CFU)*/100 ml.

*Colony Forming Units refer to the number of viable bacterial cells in a sample per unit volume. For example: 126 CFU/100 ml means 126 Colony Forming Units per 100 ml of Salt Creek water.

Alternative 1 – No-Action

In the No Action Alternative with the absence of the Federal action addressing flood control works rehabilitation, no adverse water quality impacts would occur in the project area. However, the local drainage district would likely rehabilitate the flood control works through other means because it is likely it is in their best economic interest to do so. This could result in the potential for construction related water quality impacts. Because the construction would not be conducted as part of a Federal action, it is possible that management measures to reduce

impacts to water quality (measures that minimize site runoff, use proper fill materials, use clean construction equipment and refuel them properly) may purposely or unknowingly be over-looked. Impacts to water quality that might result from the sponsor-repaired action include: increases in localized turbidity during and after construction should stockpiled material not be properly protected, silt-trapping devices not be used, or improper fill material be used and subsequently fail and result in future erosion. Additionally, spillages of fuels and oils into the waterway could occur should care is not taken to properly refuel and maintain construction equipment. Finally, increases in water quality stressors (*E. coli*) that further impact the river in the immediate area could occur if proper sanitary conditions are not followed. Although these adverse impacts could occur if the sponsor repairs the flood control works on their own, it is likely that those impacts would not reach a significant level as project impacts would be confined to the project area and areas immediately downstream. Equally likely; however, is that the Sponsor would obtain National Pollutant Discharge Elimination System (NPDES) permits and CWA Section 404 and 401 permits and abide by the special conditions contained within those permits. If the Sponsor followed the special conditions, it is likely that only minor and short-term water quality impacts and construction-related turbidity would occur. Thus, no significant water quality impacts are anticipated under the No Action Alternative.

The Preferred Alternative

The Preferred Alternative would result in a Federal action where the damaged flood control works are definitely rehabilitated. The Preferred Alternative may result in potentially minor and short-term construction-related impacts to water quality resulting from site runoff and increased turbidity. These impacts would be avoided and/or minimized to the greatest extent possible by implementation of BMPs and measures required under the NPDES permit. BMPs would minimize potential adverse sedimentation from entering aquatic resources during construction and would minimize the introduction of fuel, petroleum products, or other deleterious material from entering the waterway. Such management practices may consist of erosion control fences; storing equipment, solid waste, and petroleum products above the ordinary high water mark and away from areas prone to runoff; and requiring that all construction equipment be clean, free of leaks, and refueled in designated areas with containment berms. To prevent fill from reaching water sources by wind or runoff, fill would be covered, stabilized or mulched, and silt fences would be used as required. The Federal action also would require use of approved fill materials and the project would be conducted in accordance with Nationwide Permit 3 – Maintenance. This permit authorizes the repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure, or fills, provided that the structure or fill is not to be put to uses differing from those originally authorized. Coordination with the Omaha District's Regulatory Office (Regulatory Office) was conducted to ensure that use of Nationwide Permit 3 was appropriate. The Regulatory Office coordinated with the Nebraska Department of Environmental Quality (NDEQ) during preparation of Nationwide Permit 3 to ensure compliance with Section 401 of the CWA. Results of that coordination concluded with issuance of a "blanket" Water Quality Certification that was "tied to" Nationwide Permit 3. Because construction of the federal action would be required to obtain and abide by this authorization, all

appropriate measures would be taken to minimize erosion and storm water discharges during and after construction. As such, impacts to water quality would not be considered significant. In addition, the federal action would not contribute to or add water stressors during project implementation as proper sanitary measures would be required, so no impact the rivers impaired uses would occur. As such, no significant impacts to water quality would occur. No long-term impacts to water quality would be anticipated.

3.2.3 NOISE

Existing Conditions

Noise is defined as unwanted sound that interferes with normal activities or in some way reduces the quality of the environment. The proposed project area consists primarily of urban areas as Salt Creek runs through the middle of the city of Lincoln. Sources of noise in the proposed project area consist of automobiles, light construction activities (e.g., road work), and industry.

Alternative 1 – No-Action

In the No Action Alternative, no noise would be produced in the proposed project area. However, the sponsor would likely conduct the project through other means because it is almost always in their best economic interest. This would result in the potential for minor, temporary construction-related noise. There is a remote chance that the noise from project construction could disturb persons participating in outdoor recreation on lands in the project areas. BMPs to reduce noise may not be implemented so a greater than necessary amount of noise, both in intensity and duration, could occur but the amount of noise generated likely would not be deemed significant. No long-term noise would occur from implementation of the No Action Alternative.

The Preferred Alternative

The Preferred Alternative would result in minor short term construction related noise impacts. These impacts would result from the operation of heavy machinery during project construction. These noise levels would be in addition, but similar to, noise produced by urban activities which routinely occur in the project area. There is a remote chance that the noise from project construction could disturb persons participating in outdoor recreation on lands in the project areas. No long-term noise would occur from implementation of the Preferred Alternative.

BMPs, such as not idling machinery when not in use and conducting work during normal business hours would be implemented throughout the project area to reduce noise when in noise-sensitive areas. As such, the noise produced by the Preferred Alternative would not be considered significant.

3.2.4 WETLANDS

Existing Conditions

The U.S. Fish and Wildlife Service's (USFWS) National Wetlands Inventory Database located at: https://www.fws.gov/wetlands/Wetlands-Mapper.html was consulted to determine if any wetlands might occur within the proposed project area. Information obtained from the database revealed that no wetlands occur within the areas of the levee proposed for rehabilitation.

Alternative 1 – No-Action

In the No Action Alternative with the absence of the Federal action addressing flood control works rehabilitation, no impacts to wetlands would occur in the project area. Even if the local sponsor were to rehabilitate the flood control works through other means, no impacts to wetland would occur because no wetlands exist in the rehabilitation areas where construction would take place.

The Preferred Alternative

Because no wetlands occur in the rehabilitation areas where construction would take place, no impacts to wetlands would occur from construction of the Preferred Alternative.

3.2.5 AQUATIC RESOURCES/FISHERIES

Existing Conditions

Various fish species occur in Salt Creek. One study conducted in the Salt Creek basin in 1977 collected individuals representing 12 families and 34 species. Species included channel catfish (*Ictalurus punctatus*), blue catfish (*Ictalurus furcatus*), largemouth bass (*Microterus salmoides*), walleye (*Sander vitreus*), red snapper (*Lutjanus campechanus*) and northern pike (*Esox lucius*), which are considered desirable sport fish. Members from the sucker (Catostomidae), sunfish (Centrarchidae), carp, minnows and shiners (Cyprinidae) as well as topminnow (Cyprinodontidae) families also were present. Other species include the shortnose gar (*Lepisosteus platostomus*), brook stickleback (*Culaea inconstans*), black and yellow bullhead (*Ameiurus melas* and *natalis*) and freshwater drum (*Aplodinotus grunniens*) (Maret and Peters, 1980). These species are found in Salt Creek on a year-round basis and use the creek for feeding, breeding, and sheltering.

Presently, 13 species of amphibians are known to exist in the entire State of Nebraska. In Eastern Nebraska, the tiger salamander (*Ambystoma trigrinum*), cricket frog (*Acris crepitans*), woodhouse toad (*Bufo woodhousii*), western gray tree frog (*Hyla chrysoscelis*), plains leopard frog (*Rana blairi*), northern leopard frog (*Rana pipiens*) and western striped chorus frog (*Pseudacris triseriata*) are amphibians that have a high probability of being found in and around

the project area. These species could occur in the proposed project area on a year-round basis and would use the area for feeding, breeding, and sheltering.

Alternative 1 – No-Action

In the No Action Alternative with the absence of the Federal action addressing flood control works rehabilitation, no adverse impacts to fisheries would be occur. However, the local drainage district would likely rehabilitate the flood control works through other means because it is likely it is in their best economic interest to do so. This could result in temporary construction related impacts to fish, and other aquatic resources such as amphibians and macroinvertebrates. Construction-related noise and vibrations from machinery and rock placement as well as human presence could cause fish and mobile aquatic species to flee the immediate areas where construction would be occurring. Immobile aquatic species could be covered by rock and other fill materials. These impacts would last only as long as construction occurs, and those mobile species that fled the area could return upon project completion. As such, the impacts to aquatic resources from implementation of the No Action alternative while adverse would not be considered significant. No long-term impacts to aquatic resources would occur from implementation of the No Action Alternative.

The Preferred Alternative

The Preferred Alternative would result in a Federal action where the damaged flood control works are definitely rehabilitated. The Preferred Alternative would result in potentially minor construction-related impacts to fish, amphibians, and macroinvertebrates. The potential impacts to these resources are primarily related to noise and vibrations from machinery, rock placement and human presence. These disturbances would cause mobile species to flee the site while construction is taking place. Those aquatic species incapable of fleeing the site would be covered with rock and other related fills. Upon completion of construction, any aquatic species frightened off from construction-related activities could return to the area. Because construction is slated for the winter months prior to spring migrations, impacts to aquatic resources (spawning) would be diminished. As such, the impacts to aquatic resources from implementation of the Preferred Alternative are not considered significant. No long-term impacts to fisheries would occur from implementation of the Preferred Alternative.

3.2.6 VEGETATION

Existing Conditions

Vegetation in Eastern Nebraska was historically a tallgrass prairie with a limited extent of woody vegetation found adjacent to rivers and streams. Prior to 1855, a distinct prairie-forest ecotone restricted to floodplains, terraces and other uplands bordering riparian areas existed. It is thought that lack of fire intensity and frequency allowed woody vegetation to colonize the region. Presently, cottonwood (*Populus deltoides*), bur oak (*Quercus macrocarpa*), American basswood

(*Tilia americana*) and rough-leaved dogwood (*Cornus drummondii*) are more common than they were prior to settlement of the region (Rothenberger, 1989).

Of all the grassland types found in North America, the tallgrass prairie has been considered to be the most devastated with a national loss of approximately 95 percent. One of the best-studied tallgrass prairies is Nine-mile Prairie, located near Lincoln where 291 native prairie plants still exist over approximately 10 square miles. Species such as big bluestem (*Andropogon gerardii*), little bluestem (*Schizachyrium scoparium*), Indiangrass (*Sorghastrum nutans*), switchgrass (*Panicum virgatum*) and several sunflower (*Helianthus* spp.) species are presently found in this region (Johnsgard, 2007).

Within the project area footprint, vegetation and native diversity is limited, as lands surrounding Salt Creek are heavily urbanized. The vegetation within the repair areas consists of regularly maintained brome grasses that were planted as part of the original project to minimize erosion on the levees. Some agricultural lands are located near the maintained grasses and are outside of the proposed construction areas.

Alternative 1 – No-Action

In the No Action Alternative with the absence of the Federal action addressing flood control works rehabilitation, no adverse impacts to vegetation would occur in the project area. However, the local drainage district would likely rehabilitate the flood control works through other means because it is likely it is in their best economic interest to do so. This could result in temporary construction related impacts to vegetation. Grading, scraping and reshaping of the proposed rehabilitation areas by construction equipment would occur and the existing grasses would be disturbed. Additionally, getting equipment to and from the constructions sites, staging materials, and conducting general construction activities also could affect grassed areas although it is likely that agricultural lands would be used for these purposes. Following the repairs, the levees, staging areas, and haul roads would be returned to vegetative species that existed prior to construction, to ensure erosion to those areas is minimized, and to provide for ease-of-maintenance since levee maintenance is a requirement of the PL 84-99 Program. Implementation of the No Action alternative would have no significant impacts on vegetation. No long-term impacts to vegetation would occur from operation of the No Action alternative.

The Preferred Alternative

The Preferred Alternative would result in a Federal action where the damaged flood control works are definitely rehabilitated. The Preferred Alternative would result in potentially minor construction-related impacts to vegetation (maintained grasses) from grading, haul road construction, staging of materials, and through general construction activities. Agricultural lands would most likely determine appropriate staging areas. Levee areas disturbed, and not otherwise hard-surfaced, would be re-seeded with like grasses upon completion of construction activities. No impacts to trees would occur. The proposed project would not result in significant impacts to

vegetation. No long-term impacts to vegetation would occur from implementation of the Preferred Alternative.

3.2.7 WILDLIFE

Existing Conditions

Mammals that may be found in the proposed project area include those that are accustomed to human presence. These species include white-tailed deer (*Odocoileus virginianus*), raccoon (*Procyon lotor*), fox squirrel (*Sciurus niger*), eastern cottontail rabbit (*Sylvilagus floridanus*), and opossum (*Didelphis virginiana*). These species occur in the area on a year-round basis and use the area for breeding, feeding, and sheltering.

Common birds found on site include those adapted to urban environments such as blue jay (*Cyanocitta cristata*), mourning dove (*Zenaida macroura*), killdeer (*Charadrius vociferus*), cardinal (*Cardinalis cardinalis*), American robin (*Turdus migratorius*), and swallows (*Hirundo spp.*). These species occur seasonally as migrants and likely use the grasses when present for resting or feeding on insects.

Raptor species that may occur within or near the project are limited to red-tailed hawks (*Buteo jamaicensis*), Cooper's hawks (*Accipiter cooperii*), and sharp-shinned hawks (*Accipiter striatus*). These raptors likely use the site primarily for feeding on small birds and field mice. No trees occur within in proposed project area that would support perching or nesting sites for these species.

Migratory Bird Treaty Act (MBTA)

Although the provisions of MBTA are applicable year-round, most migratory bird nesting activity within the project area typically occurs between April 1 through July 15 (songbirds), and February 1 to July 15 (raptors). During this period, trees or grasslands with nests containing eggs, young, or adult birds engaged in nesting activities would be considered active. However, some migratory birds are known to nest outside of the aforementioned primary nesting period. Vegetation removal is generally deemed a disturbance if conducted during these times so clearing of vegetation should be scheduled to occur outside the primary nesting periods. If construction of a project occurs during the primary nesting season or at any other time that may result in the 'take' of nesting migratory birds, a qualified biologist should first conduct a field survey of the affected habitats to determine the absence or presence of nesting migratory birds. Surveys should be conducted immediately preceding the proposed construction activities. In the event an occupied nest of species protected by the MBTA is observed prior to construction activities and is within the project area boundaries (or line of sight for bald eagle), construction should not be started and consultation with the USFWS should be initiated to ensure compliance with the MBTA. Measures and recommendations (buffer distance, access restriction, and timing of construction) by the USFWS to avoid adverse impacts to nesting birds may need to be implemented.

Bald and Golden Eagle Protection Act (BGEPA)

The bald eagle has been de-listed from the ESA, but continues to be protected under the BGEPA, MBTA, and Lacey Act -16 U.S.C. § 701, May 25, 1900. The BGEPA prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" bald eagles, including their parts, nests, or eggs. The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." This definition also covers impacts that result from human induced alterations initiated around a previously used nest site during a time when eagles are not present; if, upon the eagle's return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering, and causes injury, death or nest abandonment. A survey for eagle nests should be conducted by a qualified biologist if the proposed activities are to take place within the active nesting season of bald eagles. No bald eagles (*Haliaeetus leucocephalus*) or bald eagle nests occur in or adjacent to the proposed project areas, including within the "line-of-sight" of the proposed project areas.

Alternative 1 - No-Action

In the No Action Alternative with the absence of the Federal action addressing flood control works rehabilitation, no adverse impacts to wildlife would occur in the project area. However, the local drainage district would likely rehabilitate the flood control works through other means because it is likely it is in their best economic interest to do so. This may result in temporary construction related impacts to area wildlife. Noise from the operation of construction equipment, dust generated from construction activities, and human presence, would likely cause wildlife species to temporarily avoid the area. However, any disturbed wildlife could simply return to the area upon project completion. As such, construction-related impacts are not considered significant to area wildlife.

Grading, scraping and reshaping of the proposed project areas by construction equipment and getting equipment to and from the construction sites could cause a temporary disturbance to to ground-nesting birds. If construction could be completed within the winter months as anticipated in the Preferred Alternative, impacts to migratory birds would be avoided. However, because the sponsor would have to generate their own funds for the flood control works repair and this might take some time, construction may not be able to commence prior to the arrival of migratory birds. If construction occurs within the primary nesting season of migratory birds, take of ground-nesting birds could result. It would be difficult to determine if ground-nesting migratory birds were disturbed under this alternative because avian surveys likely would not be conducted. Additionally, it would be difficult to estimate potential migratory bird take under this scenario. It is believed that potential impacts to avian species, while adverse, would not be considered significant. No impacts to bald eagles or their nests are anticipated since none were observed in the proposed project areas.

The Preferred Alternative

The Preferred Alternative would result in a Federal action where the damaged flood control works are definitely rehabilitated. The Preferred Alternative would be constructed within the winter months to ensure repairs are completed prior to the anticipated high spring flows in the coming year and the arrival of migratory birds, thus impacts to migratory birds and wildlife species would be avoided as these species would likely not be active in the area during construction. No long-term impacts to wildlife species or migratory birds would occur from implementation of the Preferred Alternative. No impacts to bald eagles or their nests are anticipated.

3.2.8 THREATENED AND ENDANGERED SPECIES

Existing Conditions

The USFWS's website at http://www.fws.gov/midwest/endangered/lists/nebraska_cty.html was consulted to determine which listed species occur within Lancaster County, Nebraska. The website listed gray wolf (*Canis lupus*), Salt Creek tiger beetle (*Cicindela nevadica lincolniana*), and western fringed prairie orchid (*Platanthera praeclara*) as occurring in Lancaster County, Nebraska.

The grey wolf is a keystone predator and an integral component of the ecosystem to which it typically belongs. The wide range of habitat in which wolves can thrive reflects their adaptability as a species, and includes temperate forests, mountains, tundra, taiga, and grasslands. The grey wolf is not found in the project area and have not been seen in the area for many years primarily because the area is located within an urban setting with the continuous presence of human activity. In addition, the Great Plains have been extensively converted from prairie to cropland and urban areas making migration corridors or maintenance of a local population unlikely. The grey wolf is most commonly seen in Montana, Minnesota, and North Dakota.

Salt Creek tiger beetle is confined to eastern Nebraska saline wetlands and associated streams and tributaries of Salt Creek in the northern third of Lancaster County. The insect is found along unvegetated mud banks of streams and seeps that contain salt deposits, and in association with saline wetlands and exposed mud flats of saline wetlands. Salt Creek tiger beetles are currently limited to the moist, salt-encrusted banks of the Little Salt Creek, which is north of the proposed project area. No Salt Creek tiger beetle occur within the proposed project area.

Western prairie fringed orchids are found in native unbroken tall grass prairies, wet prairies and sedge meadows. Lands adjacent to Salt Creek are either urban areas or are farmed. The proposed project areas have been disturbed in the past to construct the levees and are regularly disturbed during maintenance activities. No unbroken tall grass prairies, wet meadows, or sedge

meadows are found within the proposed project areas. Subsequently, no western prairie fringed orchids occur on site.

Table 2: Federally-listed Endangered and Threatened Species in Lancaster County, Nebraska.

Status	Common Name (Scientific Name)	Likelihood of Occurrence	Preferred Habitat
Threatened	Gray wolf (*Canis lupus*)	Not Likely to Occur within the Action Area.	Temperate forests, mountains, tundra, taiga, and grasslands.
Endangered	Salt Creek tiger beetle (*Cicindela nevadica lincolniana*)	Not Likely to Occur within the Action Area.	Unvegetated mud banks of streams and seeps that contain salt deposits and exposed mud flats of saline wetlands.
Threatened	Western prairie fringed orchid (*Platanthera praeclara*)	Not Likely to Occur within the Action Area.	Tallgrass Prairie.

In accordance with Section 7 of the Endangered Species Act, the NWO contacted the USFWS by email on February 24, 2015, to inform them of the proposed project and request concurrence with the determination that the proposed project would have 'no affect' on the gray wolf, Salt Creek tiger beetle, or western prairie fringed orchid. Additionally, the NWO informed the USFWS, as part of the Fish and Wildlife Coordination Act that no impacts to wetlands, migratory birds, their nests, or bald eagles or their nests would result from implementation of the preferred alternative.

Alternative 1 - No-Action

Because the gray wolf, Salt Creek tiger beetle, and western prairie fringed orchid do not occur within the proposed project areas, no affect to these species would occur from the Sponsor-related No Action alternative.

The Preferred Alternative

Because the gray wolf, Salt Creek tiger beetle, and western prairie fringed orchid do not occur within the proposed project areas, no affect to these species would occur from implementation of the Preferred Alternative.

3.2.9 CULTURAL RESOURCES

Existing Conditions

The National Historic Preservation Act of 1966 (Public Law 89 80 655), as amended, and other applicable laws and regulations require Federal agencies to take into account the effects of their undertaking on significant cultural resources within the project area of the proposed undertaking, as well as its area of potential effect (APE). Typically, these studies require archival searches and field surveys to identify any cultural resources. When significant sites are recorded, efforts are made to avoid the resource then minimize adverse effects and preserve the site(s) in place. If any significant sites cannot be avoided and would be adversely impacted, an appropriate mitigation plan would be implemented to recover data that would be otherwise lost due to the undertaking.

Alternative 1 - No-Action

The USACE determined there were no historic properties located within the project's APE. Therefore, under the No Action Alternative, there would be no historic properties affected.

The Preferred Alternative

The USACE determined there were no historic properties located within the project's APE. Therefore, under the Preferred Alternative, there would be no historic properties affected.

There is always potential for an unanticipated discovery of cultural resources during construction activities. In the event that historic resources are uncovered, work would be halted immediately and a District archeologist would be notified. The work would not be continued until the area is inspected by a staff archeologist. If he or she determines that the resources require further consultation, he or she will notify the Nebraska State Historic Preservation Office.

3.2.10 RECREATIONAL RESOURCES

Existing Conditions

The recreational resources in the vicinity of the proposed project consist mainly of shore-based fishing and walking or biking along the Salt Creek levee trail.

Alternative 1 – No-Action

In the No Action Alternative with the absence of the Federal action addressing flood control works rehabilitation, no adverse impacts to recreation would occur in the project area. However, the local drainage district would likely rehabilitate the flood control works through other means because it is likely it is in their best economic interest to do so. This would result in temporary construction related impacts to fishing and Salt Creek trail use. Construction-related noise from machinery, dust from construction activities, and restrictions to certain parts of the Salt Creek trail while construction is occurring would cause recreationalist to avoid the areas where construction would be occurring and for some distance both up- and downstream. These impacts

would be considered temporary and; thus, non-significant. The recreationalist would likely return to the area upon project completion to enjoy conditions that existed prior to the project. No long-term impacts to recreation would occur from implementation of the No Action Alternative.

The Preferred Alternative

The Preferred Alternative would result in a Federal action where the damaged flood control works are definitely rehabilitated. The Preferred Alternative would result in potentially minor construction-related impacts to recreation similar to those described above for the Sponsor-related No Action alternative. Similar to the Sponsor-related action, impacts to recreation from the Preferred Alternative would be temporary, short term, and considered non-significant. No long-term impacts to recreation would occur from implementation of the Preferred Alternative.

3.2.11 ECONOMICS

Existing Conditions

Repairing damaged flood control works is typically in the sponsor's best financial interest, with or without Federal assistance. As demonstrated by past repairs through the PL 84-99 Emergency Levee Rehabilitation Program, the benefit to cost ratios for levee repair are almost always greater than one, meaning that the proposed project is justified or economically feasible. It is almost always more economical to repair damaged flood control works than to construct larger facilities that provide higher levels of flood risk management or leave critical infrastructure exposed to future high flow events.

Alternative 1 – No-Action

This alternative would likely result in the project Sponsor seeking funding to repair the levee from some other source or the project sponsor repairing the levee at their own expense. This would likely result in a larger portion of local financial resources being used for flood control works repairs and potential financial hardships to local community if these resources are not available.

The Preferred Alternative

The Preferred Alternative would maintain the same level of flood risk management that existed prior to the flood damage, as required by ER 500-1-1. This would result in no long term changes in economic conditions as a result of the flood control works repair. Public and private infrastructure protected by the flood control works prior to the flood damage would continue to have the same protection that existed prior to the flood control works being damaged. Minor short-term benefits to the local communities could occur from the Preferred Alternative as a result of increased expenditures by construction workers for gasoline, food, and other incidentals.

3.2.12 CUMULATIVE IMPACTS

The Council on Environmental Quality Regulations defines cumulative impacts as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time" (CEQ, 1997). These actions include on- or off-site projects conducted by government agencies, businesses, communities, or individuals that are within the spatial and temporal boundaries of the current action being considered. The geographical area of consideration is located within/along the floodplain of Salt Creek and its tributaries.

Salt Creek and its tributaries have been altered by past actions such as bank stabilization, construction of grade control structures, roads/bridges, agricultural and urban levees, channelization, water withdrawal for human and agricultural use, urbanization and other human uses. These activities have substantially altered the terrestrial and aquatic ecosystem within the watershed under consideration. Some examples of the alterations that have occurred include: wetland losses, development in the floodplain, conversion of riparian habitat to agriculture and urban development, and floodplain cut-off from the river.

The Preferred Alternative would provide flood control works rehabilitation assistance to the levee sponsor because they participate in the PL 84-99 Program. The Recommended Plan would not involve increased obstructions to the floodway. The rehabilitation of the flood control works consists of repairs of existing structures to their previous condition. These types of projects typically result in minor short-term construction-related impacts to wetlands, fish, wildlife, and the habitats upon which they depend; however, there are no collectively significant cumulative environmental impacts of the Preferred Alternative primarily because it restores the existing flood control works back to its pre-damaged condition. Potential adverse affects are construction-related (e.g., increased noise, turbidity, and dust) and are of a minor and temporary nature.

It is likely, even without assistance from the USACE's PL 84-99 Program, that these flood control works would be repaired either using some other source of public funding or with private funds from the sponsor. If private funds are used, there is greater risk of adverse impacts to terrestrial habitat, fish and wildlife, water resources, the floodplain, cultural resources, and other resources because permits and BMPS may purposefully or inadvertently be overlooked.

The USACE, which administers Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the CWA, has issued and would continue to evaluate permits authorizing the

placement of fill material in the waters of the United States and/or work on, in, over or under a navigable water of the United States including Salt Creek and its tributaries. Of the reasonably foreseeable projects and associated impacts that would be expected to occur, future PL 84-99 projects would continue to have minor effects on the environment as long as floods continue to destroy the flood control works. Because the PL 84-99 projects at most would merely restore the flood control works to their pre-existing state, they should not induce such development in any substantial way. The possibility of wetland conversion and the clearing of riparian habitat are ever present, and these activities also tend to impact these resources. Most of the floodplain is already protected by either agricultural levees in rural areas or urban levees in metropolitan areas. There is a trend towards converting agricultural levees to urban levees as metropolitan areas continue to grow.

The cumulative impacts of the proposed action when added to other present and future actions, even when added to the past degradation actions on Salt Creek and its tributaries, do not result in a net increase in impacts because the proposed action does not result in an addition to flood heights or reduced floodplain area. Instead, it is merely a form of maintenance to the existing flood risk management capability. Thus, no significant negative cumulative impacts associated with the Preferred Alternative have been identified.

4.0 COORDINATION

Flood control works rehabilitation projects completed by the Corps under authority of Public Law 84-99 generally do not require the preparation of an Environmental Impact Statement. These projects typically result in long-term social and economic benefits and the adverse environmental effects are typically minor/short-term construction related. The minor impacts associated with these projects are typically well outweighed by the overall long-term social and economic benefits of these projects. The recommended plan is consistent with this assessment of typical flood control works rehabilitation completed by the Corps under authority of Public Law 84-99 of the Flood Control Act of 1944. Coordination with the resource agencies was conducted to ensure compliance with NEPA regulations. Federal and state agency comment letters are included in Appendix A.

Preparation of this EA and draft Finding of No Significant Impact (FONSI) was coordinated with the following federal and state agencies:

U.S. Department of Interior, Fish and Wildlife Service (USFWS) – awaiting comments

Nebraska Game and Parks Commission (NGPC) - awaiting comments

NWO Cultural Resources Specialist- awaiting comments

USACE Regulatory- awaiting comments

5.0 MITIGATION

Best Management Practices, as described within this EA, would be employed to minimize impacting trust resources. With implementation of these measures, no significant impacts are anticipated. The impacts to fish and wildlife from construction-related activities would be self-mitigating once the construction ceases; the fish and wildlife would simply return to the area and be able to resume normal activities upon project completion.

6.0 COMPLIANCE WITH ENVIRONMENTAL LAWS AND REGULATIONS

Bald and Golden Eagle Protection Act, 16 U.S.C. Sec. 668, 668 note, 669a-668d. In compliance. This Act prohibits the taking or possession of and commerce in bald and golden eagles, with limited exceptions for the scientific or exhibition purposes, for religious purposes of Indian Tribes, or for the protection of wildlife, agriculture or preservation of the species. No bald eagle nests where noted within the proposed project area. No bald eagles or their nests would be impacted by the proposed project.

Clean Air Act, as amended, 42 U.S.C. 185711-7. et seq. In compliance. Air quality is not expected to be significantly impacted to any measurable degree by construction or operation of the proposed project. No long-term impacts to air quality would result from the proposed project.

Clean Water Act, as amended. (Federal Water Pollution Control Act) 33 U.S.C. 1251. et seq. In compliance. The objective of this Act is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters (33 USC 1251). The Corps regulates discharges of dredge or fill material into waters of the United States pursuant to Section 404 of the CWA. This permitting authority applies to all waters of the United States including navigable waters and wetlands. The selection of disposal sites for dredged or fill material is done in accordance with the Section 404(b)(1) guidelines, which were developed by the EPA (see 40 CFR Part 230). The proposed project would place clay material and rock riprap along the banks of Salt Creek. The placement of this material is considered maintenance to previously existing structures and; therefore, would remain along the creek banks. While the Corps does not permit itself, Corps projects involving the discharge of dredged or fill material into the waters of the United States shall be developed in accordance with guidelines promulgated under the authority of the CWA (40 C.F.R. 230). Nationwide Permit Number 3 – Maintenance would be used for this project. This permit authorizes the repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure, or fills, provided that the structure or fill is not to be put to uses differing from those originally authorized. Regional and Nationwide Permits have Section 401 Water Quality Certification 'built into' them as a general condition. Section 401 ensures that a proposed water resources project is in compliance with established effluent limitations and water quality standards. Corps projects are required to obtain the appropriate authorizations and certifications.

Comprehensive Environmental Response Compensation and Liability Act (CERCLA). In compliance. Typically CERCLA is triggered by (1) the release or substantial threat of a release of a hazardous substance into the environment; or (2) the release or substantial threat of a release of any pollutant or contaminant into the environment which presents an imminent threat to the public health and welfare. To the extent such knowledge is available, 40 CFR Part 373 requires notification of CERCLA hazardous substances in a land transfer. This project would not involve any real estate transactions and no hazardous substances are known to occur on site.

Endangered Species Act, as amended. 16 U.S.C. 1531, et seq. In compliance. This project has been coordinated with the Fish and Wildlife Service (USFWS). An email, dated February 24, 2015, was sent to the USFWS explaining the proposed action and requesting concurrence that the proposed project would have no affect on listed species and would not impact bald eagles and migratory birds.

Environmental Justice (E.O. 12898). In compliance. Federal agencies shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States. The project does not disproportionately impact minority or low-income populations.

Farmland Protection Policy Act (Subtitle I of Title XV of the Agriculture and Food Act of 1981), effective August 6, 1984. In compliance. Compliance with this act also will satisfy the requirements set forth in Council on Environmental Quality (CEQ) Memorandum of August 11, 1980, Analysis of impacts on Prime or Unique Agricultural Lands in Implementing NEPA. No prime farmland would be converted as a result of the preferred action. As such, this project is not subject to the Farmland Protection Act.

Federal Water Project Recreation Act, as amended, 16 U.S.C. 460-1(12), et seq. In compliance. The rehabilitation of the damage flood control works would have no long term impacts on recreational use in or along Salt Creek.

Fish and Wildlife Coordination Act. 16 U.S.C. 661 et seq. In compliance. An email dated February 24, 2015, were prepared by the Corps of Engineers and sent to the USFWS and the NGPC to solicit comment on the proposed project. No further action under the Fish and Wildlife Coordination Act is required.

Floodplain Management (E.O. 11988). In compliance. The rehabilitation of damaged flood control works under the PL 84-99 Program would maintain the same level of flood risk management which existed prior to the high flow event. Thus, the preferred alternative does not support more development in the floodplain nor encourage additional occupancy and/or modify the base floodplain.

Migratory Bird Treaty Act of 1918 as amended, 16 U.S.C. 703-711, et seq. In compliance. The Migratory Bird Treaty Act of 1918 (MBTA) is the domestic law that affirms, or implements, the United States' commitment to four international conventions with Canada, Japan, Mexico and Russia for the protection of shared migratory bird resources. The MBTA governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts and nests. The take of all migratory birds is governed by the MBTA's regulation of taking migratory birds for educational, scientific, and recreational purposes and requiring harvest to be limited to levels that prevent over utilization. Executive Order 13186 (2001) directs executive agencies to take

certain actions to implement the act. The Corps will not impact migratory birds or their nests during construction of the proposed project. Construction is slated to occur during the winter months before the onset of potential high flows in the following year. Work would not be conducted within the primary nesting season of migratory birds.

National Environmental Policy Act (NEPA), as amended, 42 U.S.C. 4321, et seq. In compliance. This environmental assessment has been prepared for the proposed action and to satisfy the NEPA requirement. An Environmental Impact Statement is not required.

National Historic Preservation Act, as amended. 16 U.S.C. 470a, et seq. In compliance.

The literature review revealed that there are no historic properties listed in or determined eligible for inclusion in the National Register of Historic Places (NRHP) in the project's APE. No additional cultural resources investigations are recommended prior to the project's implementation.

There is always potential for an unanticipated discovery of cultural resources during construction activities. In the event that historic resources are uncovered, work would be halted immediately and a District archeologist would be notified. The work would not be continued until the area is inspected by a staff archeologist. If he or she determines that the resources require further consultation, he or she will notify the Nebraska State Historic Preservation Office.

Noise Control Act of 1972, 42 U.S.C. 4901 et seq. In compliance. While there will be an initial noise disturbance during construction, there will be no long-term noise disturbances associated with this project.

Protection of Wetlands (E.O.11990). In compliance. No impacts to wetlands are anticipated.

Rivers and Harbors Act, 33 U.S.C. 401, et seq. In compliance. A Section 10 permit is not required for Corps projects.

Watershed Protection and Flood Prevention Act, 16 U.S.C. 1101, et seq. In compliance. The contractor will provide the Corps with an erosion and sedimentation control plan prior to the start of construction. Best Management Practices will be implemented to minimize erosion and sedimentation potential.

7.0 CONCLUSION

The proposed action consists of repairs to the flood control works along Salt Creek in Lancaster County, Nebraska. The repairs would consist of reshaping the levee banks back to a 3:1 slope and replacing lost bank material with compacted, non-dispersive clay and riprap; constructing landward piggy-back levees at discrete locations if space is available; installing sheet pile cutoff walls, replacing lost sod, and filling sink holes. This office has assessed the environmental impacts of the proposed action and has determined that the proposed action would have no impacts on Prime Farmlands, Environmental Justice, or Cultural Resources, Endangered and Threatened Species, or Wetlands. Minor, short-term, and construction-related impacts would occur to Air Quality, Water Quality, Aquatic Resources, Vegetation, Wildlife, and Recreation. There are no adverse cumulative impacts associated with the proposed action.

8.0 PREPARERS

This EA and the associated draft FONSI were prepared by Mr. Matthew Vandenberg, Environmental Resources Specialist, with relevant sections prepared by: Sandra Barnum Cultural Resources. The address of the preparers is: U.S. Army Corps of Engineers, Omaha District, 1616 Capitol Avenue, Omaha, Nebraska 68102.

Prepared By:_____ Date:_____
Matthew Vandenberg
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Reviewed By:_____ Date:_____
XXXXXXX
Environmental Resources Specialist

Approved By:_____ Date:_____
Eric Laux
Chief, Environmental Resources and Missouri River
Recovery Program Plan Formulation Section

APPENDIX A

Agency Coordination

From:	Vandenberg, Matthew D NWO
To:	"Eliza Hines"; "Albrecht, Frank"; Barnum, Sandra V NWO; McCullor, Matthew; Wray, Matt T NWO

Subject:	PL 84-99 Levee Rehabilitation - Salt Creek - Lincoln
Date:	Tuesday, February 24, 2015 2:27:00 PM
Attachments:	THIS Salt Creek EA.docx

Team:

The USACE proposes to repair portions of the left and right levees of Salt Creek that were damaged by high flows during October 2014.

The levee rehabilitation project is located within the city of Lincoln, Lancaster County, Nebraska.

Damages include: erosion, bank sloughing and slides, lost sod, displaced riprap, and sinkhole development. The proposed project repairs include reshaping the levee banks back to a 3:1 slope and replacing lost bank material with compacted, non-dispersive clay and riprap; constructing landward piggy-back levees at discrete locations if space is available; installing sheet pile cutoff walls, replacing lost sod, and filling sink holes. Project repairs would be authorized by Nationwide Permit 3.

Habitat at the repair sites is limited consisting of brome grasses adjacent to agricultural fields or urban development.

No habitat for grey wolf, Salt Creek tiger beetle, or western fringed prairie orchid occurs on site so NO AFFECT to these species would result.

No wetlands occur within the repair areas, no bald eagle nests are within "line-of-sight" of the repairs, and no trees need to be removed, thus, no impacts to these resources would occur.

The project consists of repairs to existing facilities (levees) so no impacts to cultural resources are anticipated.

Minor construction-related impacts to air quality, water quality, aquatic species, urban wildlife, and recreation would occur. Slight increases in noise during construction also would result. These adverse impacts are not considered significant and Best Management Practices would be employed to reduce these minor, short-term impacts; no long-term impacts would occur following construction.

The attached DRAFT Environmental Assessment provides further details on the proposed project and the existing environmental conditions. There are placeholders highlighted in yellow that will be updated following any comments you may have.

Understanding that responses generally are not provided when NO AFFECT determinations are made, the Corps, none-the-less would appreciate a response from your agency to let us know that you have at least had the opportunity to review the proposed project. If you should have any comments on the proposed project, please do not hesitate to contact me with that information.

Thanks for your assistance,

Matthew D. Vandenberg
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402/995-2694